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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/914,192

10/31/2001

Humio Inaba

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9467

2292

7590

09/30/2004

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EXAMINER

PAIK, STEVE S

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/914,192

Applicant(s)

INABA ET AL.

Examiner

Steven S. Paik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-28 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 13-28 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 31 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 06, 2004 has been entered.

Response to Amendment

2. Receipt is acknowledged of the Amendment filed June 7, 2004. The amendment includes cancelled claims 1-12 and newly added claims 13-28.

Claim Objections

3. Claims 14-17 are objected to because of the following informalities:

Re claims 14 and 15, the phrases, "of a kind capable of" in line 2 and "capable of" in line 3 appears to be vague and indefinite.

Re claims 16 and 17, the phrases, "capable of" in line 2 and "capable of" in line 3 appear to be vague and indefinite. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 20 recites the limitation "said overlay file" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 13-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soules et al. (US 5,522,623) in view of Yoshihara (US 5,270,526).

Re claims 13-18, Soules discloses an information carrier medium (10 in Fig. 1 or 20 in Fig. 2) comprising:

at least first and second sheet members (upper lamina 11 or 21 and lower lamina 12 or 22. Also there is disclosed an intermediate coded layer between the upper and lower laminae.) each having first and second surfaces opposite to each other (top and rear faces), said first and second sheet members (upper lamina 11 or 21 and lower lamina 12 or 22) being laminated together (Abstract and see col. 5, lines 65, 66 and col. 6, lines 13) with the first surface of the first sheet member bonded to the first surface of the second sheet member (the top face of the second member is supporting the intermediate coded layer);

a security indicium (a barcode 13, a finger print 16, a barcode 23, or a barcode 26) formed on at least one of the first faces of the respective first and second sheet members, said security indicium being made of at least one inking material for responding to a coherent light (col. 9, Table I discloses various combinations of sources, appropriate detectors and the optical response) when irradiated thereby. It is well known in the art that coherent light includes a

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nitrogen laser, a xenon laser, an argon ion laser, and ionized neon laser. Soules teaches an IR or UV laser beam as one of various light sources in column 9, lines 5-39. A barcode reading procedure includes differentiating the amount of light absorbed and reflected from the code printed by an inking material when irradiated by a light source (col. 6, lines 43-56). Hence, the inking material used to print the barcode or fingerprint in Soules is also considered to absorb the coherent light, emit light, and scatter light when irradiated by the coherent light (col. 11, ll. 36-42) with a predetermined wavelength.

However, Soules is silent about the characteristics of the inking materials as recited in the claims of the present application.

Yoshihara discloses a card type recording medium having plurality types of inks which normally exhibit the same color visually but exhibit different optical characteristics under a predetermined (invisible wavelength) condition provided in blocks in a desired pattern. As an example, two types of inks A and B are of the same color visually, they cannot be distinguished from each other visually. In the figure, reference characters A and B are affixed in the blocks to illustrate the ink arrangement. Figure 2 shows an example of reflection characteristics of the inks A and B. The two reflection levels do not exhibit much difference to visible light but they exhibit much difference to infrared ray. Foregoing optical characteristics of the two inks A and B make the false alteration of information on the card type-recording medium more difficult.

Therefore, it would have been obvious at the time the invention was made to a person having of ordinary skill in the art to have incorporated the teachings of Yoshihara into the teachings of Soules et al. for the purpose of increasing the authenticity of the information on a card type-recording medium and minimizing the risks of fraudulent activities. .

Re claims 19 and 20, Soules in view of Yoshihara discloses the information carrier medium (10 in Fig. 1, 20 in Fig. 2 or 30 in Fig. 3) recited as rejected claim 13 stated above, wherein said at least first and second sheet members are made of an opaque synthetic resin containing a polyvinyl chloride copolymer.

Re claims 21 and 22, Soules in view of Yoshihara discloses the information carrier medium (10 in Fig. 1, 20 in Fig. 2 or 30 in Fig. 3) recited as rejected claim 13 stated above, wherein said secondary indicium comprises a bar code and characters (13) made of the two inking materials.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soules et al. (US 5,522,623) as modified by Yoshihara (US 5,270,526) as applied to claim 13 above, and further in view of Rudland (US 4,538,059).

Re claim 23, the teachings of Soules in view of Yoshihara have been discussed above with the exception of an overlay film.

Rudland discloses an identification card or badge with a concealed code, which, while being invisible to the naked eye when viewed in visible light, is readable by an optoelectronic reader using infrared radiation. The code further comprises successive digits represented by transparent windows alternating with regions opaque to infrared radiation. The card comprises two sheets (2 and 4) with a code sheet (6) laminated with a transparent protective layer of PVC or other similar clear plastic (9). A magnetic strip and a space for a specimen signature, as is usual with such cards for the purpose of increasing authenticity of the cardholder.

In view of Rudland teaching, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further incorporate an identification card with an

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overlay film such as a transparent protective layer of PVC or other similar clear plastics with a magnetic strip and a space for a specimen signature in addition to the teachings of Soules in view of Yoshihara due to the fact that authenticity and security of the card usage can be substantially improved for the purposes of preventing fraudulent activities.

Claims 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soules et al. (U.S. Patent 5,522,623) as modified by Yoshihara (US 5,270,526) as applied to claim 13 above, and further in view of Hagstrom et al. (US 6354,502).

Re claims 24-28, the teachings of Soules in view of Yoshihara have been discussed above. Soules discloses an information carrier medium and a reading system of the medium. Yoshihara discloses a card type recording medium having plurality types of inks which normally exhibit the same color visually but exhibit different optical characteristics under a predetermined (invisible wavelength) condition provided in blocks in a desired pattern. Yoshihara further discloses an electro-optical reader comprising an infrared ray source (3), a detector (light receiving element 5), a signal processor (CPU 10), a storage device (for storing a reference signal) and a comparator (comparator 14) to verify the authenticity of the card type-recording medium.

Although Soules in view of Yoshihara discloses a reading device (electro-optical reading means in col. 6, ll. 43-56), the references do not specifically disclose two light sources.

Hagstrom discloses an electro-optical reader comprising two light sources (red LED 16 and blue LED 18 in Fig. 1) for the purpose of sensing different color segments. The different colored light (red and blue) from the different colored LEDs 16 and 18 generate different sensor outputs, as shown in FIG. 3, when reflected off the same label 15 of labeled component 12.

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Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further combine a pattern or code reading device including two light sources, a photo-detector, and a processor, as taught by Hagstrom with the information carrier medium of Soules in view of Yoshihara due to the fact that more selective and precise detection of wavelengths and transmission of the detected wavelengths can be achieved through a different colored light sources.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kumimoto (US 5,198,646) discloses a magnetic card including two different kinds of inks and a detection apparatus comprising a light source, a detector, and a processor.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 571-272-2404. The examiner can normally be reached on Mon - Fri (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Steven S. Paik
Examiner
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